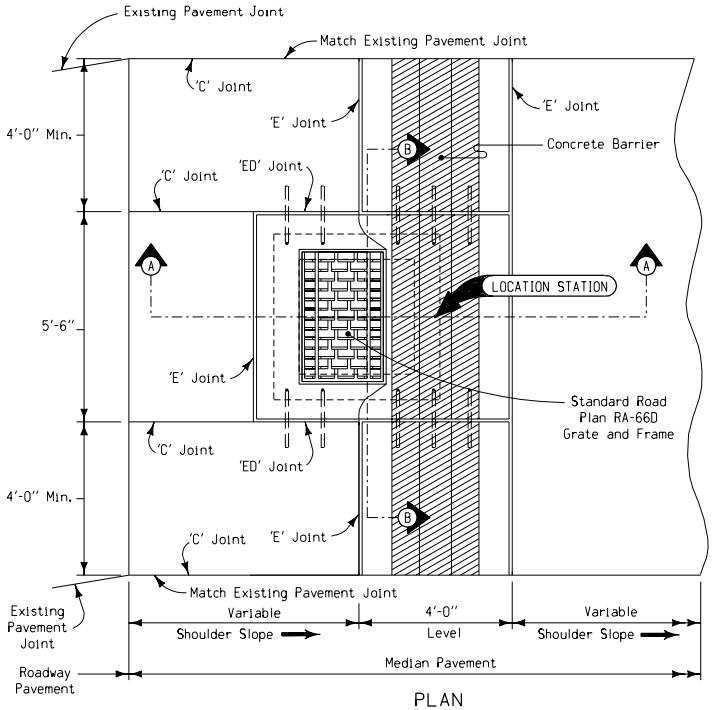
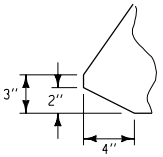
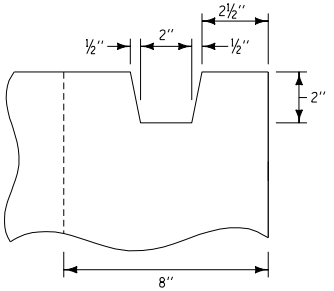


PLAN

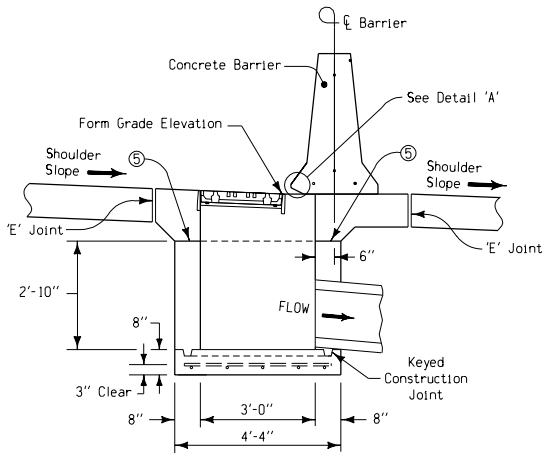


DETAIL 'A'

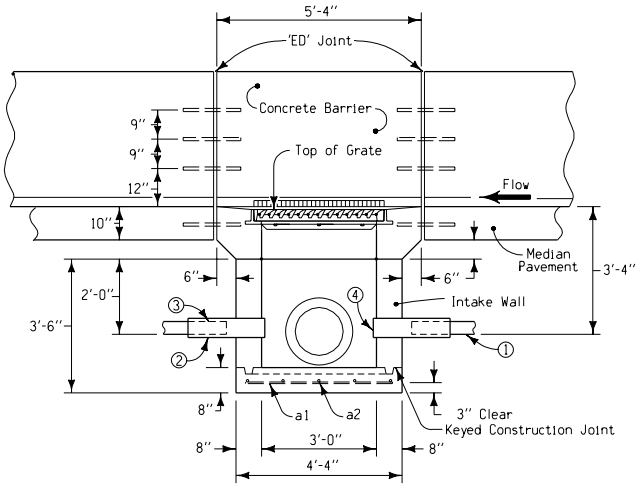


KEYED CONSTRUCTION JOINT DETAIL

REINFORCING BAR LIST							
MARK	SIZE	LOCATION	SHAPE	NO.	LENGTH	WEIGHT	SPACING
a1	4	Base	———	5	4'-0"	13	1'-0"
a2	4	Base	———	5	4'-0"	13	1'-0"
					Total	26 lbs.	



SECTION A-A



SECTION B-B

GENERAL NOTES:

This sheet illustrates the construction and installation of a median intake for use under a concrete barrier.

Materials and methods of construction shall be in accordance with current Standard and Supplemental Specifications.

All reinforcing bars shall be ASTM A 615, Grade 60.

Precast concrete units with these dimensions may be utilized. The Contractor shall be responsible for any additional reinforcement necessary to prevent cracking during transportation and installation.

Any modification of the intake design shall be subject to the approval of the Engineer.

If unit is cast in place, storm sewer pipe shall be installed before intake sidewall construction is started. Sidewalls shall be constructed as indicated with openings for storm sewer pipe(s) smoothly shaped and inlet pipe(s) not projecting unnecessarily into well. Outlet pipe(s) shall not project beyond inside face of sidewall. Storm sewer pipe locations shown hereon are typical. Refer to detail project plans for exact locations.

All concrete for intake including base, walls, top, and boxout shall be Class 'C' concrete as per the current Standard Specifications.

Finish of the intake top or any exposed portion shall be as required for "Structural Concrete" in current Standard Specifications.

Joints in pavement adjacent to intake shall be as shown on Standard Road Plans RH-50, 51, and 52. Joint locations shall be as indicated hereon, except where specifically modified by other plan drawings or by the Engineer.

Price bid for intake does not include materials or construction of concrete barrier or boxout area. Boxout area concrete has been included with quantity for concrete pavement, shoulder or median, whichever is applicable.

Price bid for "Intake, RA-48" shall include:

A. All necessary excavation and backfill.
B. Satisfactory connection to new or existing storm sewer as per detail plans. Connections to precast units shall be grouted.
C. Furnishing all materials and constructing intake as detailed hereon.

Placing sequence: 1. Base; 2. Walls; 3. Top; 4. Boxout

① 4" Perforated Subdrain (Polyethylene corrugated tubing).

② 6" CMP 24" long.

③ Perforated Subdrain fits into CMP minimum 12" if grout is used. At contractor's option, use reducing coupler or grout.

④ Removable mesh cap, 3/8" hardware cloth.

⑤ Trowel smooth and place subgrade paper to prevent bond.

Iowa Department of Transportation
Project Development Division

STANDARD ROAD PLAN RA-48

REVISION: Replaces Design Detail Sheet 500-17.	REVISION NO.
	New
11-05-99	REVISION DATE
APPROVED BY DESIGN METHODS ENGINEER	02-11-00

MEDIAN INTAKE
ON SUPERELEVATED ROADWAY